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**COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION**

PREFILED STAFF TESTIMONY

APPALACHIAN POWER COMPANY

**For a 2023 triennial review of its base rates,
terms and conditions pursuant to § 56-585.1
of the Code of Virginia**

Volume I of VIII

Public Version

PUR-2023-00002

July 28, 2023

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Summary

Staff makes the following findings and recommendations for the Commission's consideration:

- Staff finds the Company earned a combined return on equity 5.49% for the combined Earnings Test period 2020 – 2023 ("Triennial Period"). This is \$119,572,245 below the authorized range of 8.50% - 9.90% during the Triennial Period.
- Based on its Earnings Test results and § 56-585.1 A 8 of the Code of Virginia ("§ A 8"), Staff recommends a regulatory asset of \$49,612,160 be established and amortized over a three-year period beginning January 1, 2023. The regulatory asset amount consists of the entirety of severe weather event costs incurred during the Triennial Period and eligible for deferral under § A 8.
- Based on its Earnings Test results and the requirements of § A 8, Staff witness Arwen Otwell presents a recommended going-forward revenue requirement increase of \$154,987,910.
- Staff recommends the Commission approve Staff's vegetation management adjustments totaling \$24.7 million, including Staff's recommended tracking mechanism for the targeted circuits trimming program. Staff recommends this tracker be set with an initial Virginia-jurisdictional baseline of \$18,772,810.
- Staff recommends the Commission accept the Company's proposed depreciation study, with one revision to the depreciation rate for distribution overhead conductors.
- Staff recommends a 50-50 sharing of the fuel deferral balance arising from the Company's fuel mitigation plan approved in the most recent fuel factor case.
- The Commission should accept the Company's proposed COVID-19 and SO₂ allowance regulatory assets, as adjusted by Staff. Amortization of these regulatory assets should begin January 2023.
- Staff recommends the Commission adopt Staff's other adjustments and recommendations addressed herein.

**PRE-FILED STAFF TESTIMONY
OF
SEAN M. WELSH**

APPALACHIAN POWER COMPANY

**CASE NO. PUR-2023-00002
JULY 28, 2023**

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**PRE-FILED STAFF TESTIMONY
OF
SEAN M. WELSH**

APPALACHIAN POWER COMPANY

**CASE NO. PUR-2023-00002
JULY 28, 2023**

INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND THE POSITION YOU HOLD WITH THE**
2 **STATE CORPORATION COMMISSION ("COMMISSION").**

3 **A. My name is Sean M. Welsh, and I am a Senior Manager with the Commission's Division**
4 **of Utility Accounting and Finance.**

5 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE CURRENT APPLICATION.**

6 **A. On March 31, 2023, Appalachian Power Company ("APCo" or "Company"), a vertically-**
7 **integrated utility serving approximately 542,000 customers in Virginia, filed an application**
8 **for a triennial review of its base rates, terms and conditions pursuant to § 56-585.1 of the**
9 **Code of Virginia ("Code") ("Triennial Review" or "Application"). The Application**
10 **includes earnings tests for the three successive test years beginning January 1, 2020, and**
11 **ending December 31, 2022 ("Triennial Period"), as well as an analysis of the Company's**
12 **going-forward cost of service and its prospective fair return on equity ("ROE").**

13 The Application asserts, among other things, APCo earned a combined ROE for
14 the Triennial Period of 5.39%, which is over \$124 million in pre-tax earnings below the
15 bottom of the ROE range of 8.50% to 9.90%, authorized for the Triennial Period.

16 The Company's going-forward analysis identifies an incremental revenue
17 requirement of \$212.6 million, based on costs the Company asserts are necessary to provide

1 safe and reliable electric service during calendar year 2024 ("Rate Year") and a proposed
2 ROE of 10.60%.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 **A.** I address the following topics:

- 5 1. Staff's earnings test review of the Triennial Period: Staff finds the Company
6 has earned a combined Triennial Period ROE of 5.49%, which is approximately
7 \$120 million below the bottom of the authorized ROE range. Based on this,
8 Staff recommends a regulatory asset of \$49,612,160, inclusive of a tax gross-
9 up, be established and amortized over a three-year period beginning January 1,
10 2024. The regulatory asset amount consists of the entirety of severe weather
11 event costs incurred during the Triennial Period and eligible for deferral under
12 Code § 56-585.1 A 8 ("Section A 8" or "§ A 8").
- 13 2. Going-forward revenue requirement increase: Based on the above finding,
14 Staff finds a going-forward revenue requirement increase is permissible under
15 the Code. Staff witness Otwell testifies to Staff's recommended going-forward
16 revenue requirement increase of \$154,987,910, based on Staff's Rate Year
17 adjustments and an ROE of 9.40%.
- 18 3. The Company's proposed vegetation management adjustments: Staff
19 recommends a Rate Year increase to vegetation management expense of
20 \$24.7 million and recommends a tracking mechanism within base rates to
21 recover costs associated with the Company's proposed end-to-end clearing of
22 its targeted circuits ("Targeted Circuits Program").

1 4. The Company's depreciation study, based on plant as of December 31, 2022:

2 Staff accepts the Company's proposed rates, including a retirement date of
3 2032/2033 for the Amos generating station units, for implementation as of
4 January 1, 2023, with one revision to the average service life for distribution
5 overhead conductors. Staff's going-forward adjustments to depreciation
6 expense are \$1,037,805 less than the Company's adjustments, primarily due to
7 Staff's changes to the depreciation study.

8 5. Carrying costs related to the fuel deferral balance: Staff proposes a 50-50
9 sharing of carrying costs related to the fuel deferral balance due to the fuel cost
10 mitigation plan approved in the Company's most recent fuel factor proceeding.

11 6. Staff's audit of the Company's COVID-19 regulatory asset deferrals: Staff
12 recommends amortizing the COVID-19 deferral over a three-year period
13 beginning January 1, 2023.

14 7. Certain other Staff adjustments: Coal Combustion Residual ("CCR") litigation
15 expenses; SO₂ allowance amortization; and Generating station operations and
16 maintenance ("O&M") expenses.

17 **Q. PLEASE IDENTIFY THE OTHER STAFF WITNESSES IN THIS CASE.**

18 **A.** In addition to my testimony, the Division of Utility Accounting and Financing presents the
19 pre-filed testimony of the following witnesses:

- 20 1. Arwen F. Otwell presents the Rate Year Analysis, base rate revenue requirement,
21 and certain accounting adjustments.

1 2. Farris M. Maddox provides a market cost of equity analysis and recommendation
2 with comments on the Company's analysis and recommendation. He also
3 recommends a statutory peer group floor return on equity.

4 3. Phillip M. Gereaux presents the Peer Group analysis prescribed in Code § 56-585.1
5 A 2 to be applied in determining the going-forward ROE for APCo in this
6 proceeding.

7 4. Cameron T. Hunt recommends the appropriate ratemaking APCo capital structure
8 and weighted cost of capital. He also recommends the appropriate earnings test
9 capital structures and costs of capital for the years 2020, 2021, and 2022.

10 5. Justin Morgan addresses Staff's Income Tax and Accumulated Deferred Income
11 Tax Adjustments for the Earnings Tests and the Going-Forward Analysis.

12 The Division of Public Utility Regulation presents the pre-filed testimony of the following
13 witnesses:

14 1. Glenn Watkins provides analyses and recommendations concerning Jurisdictional,
15 Functional, and class cost allocations. He also provides options for the assignment
16 of revenue responsibility across classes as well as various rate design
17 recommendations.

18 2. Marc A. Tufaro discusses the Company's proposed modifications to the
19 Distribution Interconnection Rider, as well as a number of rate schedules. He also
20 presents a general assessment of the competitiveness of the Company's rates in
21 comparison to its statutorily defined peer group.

22 3. Neil Joshipura discusses the Company's operational performance in terms of
23 generation plant performance, reliability, and operating efficiency. He also

discusses the Company's vegetation management program, capital danger tree program, and inspection programs.

4. Oliver C. Collier discusses the Company's proposed tariff revisions to Rider PEV and Rider EDR. He also discusses the Company's evaluation of Rate Schedule Smart Demand, Rate Schedule Smart Time of Day and Rider DRS based on the partial stipulation approved in Appalachian Power Company's 2020 Triennial Review.

EARNINGS TEST RESULTS

Q. PLEASE DISCUSS THE ROLE OF THE EARNINGS TEST IN TRIENNIAL REVIEW PROCEEDINGS.

A. Triennial review proceedings require the examination of the Company's earned return for the Triennial Period. Earnings tests for the 2020, 2021, and 2022 test years are used to evaluate the Company's actual results, on a regulatory accounting basis, for the Triennial Period.

In Case No. PUR-2020-00015, the Commission authorized an ROE of 9.20% to be used in this Triennial Review.¹ Section A 8 provides for a 70-basis point range above and below that approved ROE for APCo² triennial review proceedings and prescribes, along with Code § 56-585.1 A 2(g), statutory outcomes based on the results of the combined Triennial Period earnings test. The following chart summarizes these potential outcomes.

¹ *Application of Appalachian Power Company, For a 2020 triennial review of its base rates, terms and conditions pursuant to § 56-585.1 of the Code of Virginia, Case No. PUR-2020-00015, 2020 S.C.C. Ann. Rept. 421 Final Order (Nov. 24, 2020) ("2020 Triennial Review").*

² APCo is a "Phase I Utility" as defined by the Code. In discussing the relevant sections of the Code, I replace the term Phase I Utility with APCo in my testimony for clarity.

Table 1: Triennial Review Potential Outcomes

<8.50%	8.50%-9.20%	9.20%-9.90%	>9.90%
-No refunds -Base rate increase based on going-forward revenue requirement -Recovery of certain period costs deferred as a regulatory asset	-No refunds -Company may petition the Commission for a base rate increase ³	-No refunds -No change in base rates	-70% of earnings above top of the range refunded to ratepayers -Potential reduction to base rates -Refunds or base rate reductions may be reduced by customer credit reinvestment offset.

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S TRIENNIAL**
 2 **PERIOD EARNINGS TEST RESULTS.**

3 **A.** The Company's Application presents a combined Earnings Test ROE of 5.39%, which is
 4 below the bottom of the approved ROE range of 8.50% - 9.90% ("ROE Band"). Based on
 5 this earned ROE, the Company calculates a deficiency of \$124.4 million below the bottom
 6 of the band.

7 The Application identifies \$37,867,310 in severe weather expenses, on a
 8 jurisdictional basis, that it states meet the requirements for statutory accounting treatment
 9 under § A 8.⁴ The Company asserts these costs must be deemed period expenses, deferred,
 10 and afforded regulatory asset treatment as directed by § A 8. The Company proposes to
 11 amortize these costs over a three-year period.

³ See Code § 56-585.1 A 2(g).

⁴ See Direct Testimony of A. Wayne Allen at 8.

1 Q. PLEASE PROVIDE AN OVERVIEW OF STAFF'S TRIENNIAL PERIOD
2 EARNINGS TEST RESULTS.

3 A. Based on Staff's analysis, APCo earned an adjusted combined ROE of 5.49% for the
4 Triennial Period. This is \$119,572,245 below the Commission-authorized range of 8.50%
5 to 9.90%.

Table 2: Staff Earnings Test Results

2020 Earnings Test ROE	2021 Earnings Test ROE	2022 Earnings Test ROE	Combined Earnings Test ROE
6.50%	6.89%	3.28%	5.49%

6 Q. PLEASE IDENTIFY THE MAJOR DIFFERENCES BETWEEN THE STAFF AND
7 COMPANY EARNINGS TEST RESULTS.

8 A. The following chart outlines the primary differences between the Staff and Company
9 Earnings Test results.

Table 3: Reconciliation of Staff and Company Earnings Tests (in thousands)

Description	2020 Impact	2021 Impact	2022 Impact	Combined Impact	Staff Witness
Company Revenue (Sufficiency)/Deficiency (From Bottom of Range)	\$25,261	\$22,937	\$76,043	\$124,241	
Incentive Compensation	\$(124)	\$(1,370)	\$(1,159)	\$(2,653)	Otwell
Fuel Mitigation Carrying Costs	-	-	\$(1,440)	\$(1,440)	Welsh
Accumulated Deferred Income Taxes	\$(67)	\$(158)	\$(251)	\$(476)	Morgan
Advertising Expense	\$(73)	\$(171)	\$(65)	\$(309)	Otwell
Miscellaneous	\$53	\$102	\$(11)	\$143	
Staff Revenue (Sufficiency)/Deficiency (From Bottom of Range)	\$25,049	\$21,340	\$73,116	\$119,505	Welsh

1 Q. BASED ON STAFF'S EARNINGS TEST ANALYSIS, WHAT ACTIONS DOES
2 THE LAW PRESCRIBE?

3 A. Section A 8 states that if the Company is found to have a combined earnings deficiency
4 during the Triennial Period, "the Commission shall order increases to the utility's rates
5 necessary to provide the opportunity to fully recover the costs of providing the utility's
6 services and to earn not less than such fair combined rate of return, using the most recently
7 ended 12-month test period as the basis for determining the amount of the rate increase
8 necessary." Based on Staff's understanding of the Code and its Triennial Period Earnings
9 Test analysis, the Code requires the Commission to conduct a going-forward analysis using
10 calendar year 2022 as the test year ("Test Year"). Staff witness Otwell presents the results
11 of Staff's going-forward analysis.

12 Section A 8 also prescribes specific regulatory accounting treatment for certain
13 costs ("A 8 Expenses").⁵ Staff identifies \$37,436,046 in jurisdictional A 8 Expenses
14 (\$49,612,160 grossed-up for taxes) incurred during the Triennial Period.⁶ As this is less
15 than the combined Triennial Period underearnings, Staff recommends, consistent with
16 § A 8, deferring the entire amount of \$49,612,160 and recovering it over a three-year

⁵ Under Section A 8, these costs include: (1) costs associated with asset impairments related to early retirement determinations made by the utility for generation facilities fueled by coal, natural gas, or oil or for automated meter reading electric distribution service meters; (2) costs associated with projects necessary to comply with state or federal environmental laws, regulations, or judicial or administrative orders relating to coal combustion by-product management that the utility does not petition to recover through a rate adjustment clause pursuant to Code § 56-585.1 A 5 e; (3) costs associated with severe weather events; and (4) costs associated with natural disasters. Section A 8 provides that these costs shall be recorded as period expenses and recovered from customers in the period incurred unless they contribute to pushing the Company below the bottom of the ROE Band, in which case they may be deferred, in an amount no greater than what would bring the earned return back to the bottom of the ROE Band, and recovered over a future period to be determined by the Commission.

⁶ All of the Company's eligible A 8 Expenses are costs associated with severe weather events. Staff's A 8 Expense amount is \$431,264 less than that identified by the Company, because the Company applied a 100% jurisdictional factor to costs associated with one of its major storms in 2021. Staff applies the Virginia-Only Distribution Plant Factor to those costs, consistent with all other severe weather costs incurred during the Triennial Period.

1 period beginning January 2023. Staff witness Otwell's going-forward revenue requirement
2 incorporates this amortization.⁷

DISTRIBUTION O&M EXPENSE

Introduction

3 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE COMPANY'S**
4 **DISTRIBUTION O&M ADJUSTMENTS.**

5 **A.** The Company proposes three adjustments to its distribution O&M expense for the Rate
6 Year. First, the Company increases spending on its current tree trimming program to return
7 to the average number of miles trimmed during the 2017-2019 period. Second, the
8 Company proposes an increase to Rate Year spending on circuit and pole inspections to
9 begin a five- and ten-year cycle, respectively, to inspect its entire service territory. Lastly,
10 the Company requests a \$39.4 million increase to vegetation management expense to begin
11 a program of targeted end-to-end trimming of its worst performing sectors ("Targeted
12 Circuits Program").⁸ In total, the Company requests a \$47 million Rate Year increase in
13 vegetation management expense.

14 **Q. PLEASE SUMMARIZE STAFF'S ACCOUNTING RECOMMENDATIONS**
15 **CONCERNING THE COMPANY'S DISTRIBUTION O&M ADJUSTMENTS.**

16 **A.** As discussed by Staff witness Joshipura, Staff does not oppose APCo's proposed
17 distribution O&M programs to be enacted during the Rate Year. Based on its audit of the
18 Company's historical and proposed distribution O&M activities, Staff recommends a total

⁷ Both Staff and the Company exclude the unamortized balance from rate base.

⁸ See Direct Testimony of Jason E. Baker at 8, 19-22.

increase to distribution O&M expense of \$24.7 million. The following table presents a comparison of the Staff and Company adjustments.

Table 4: Distribution O&M Adjustments Summary

Description	Increase general right-of-way miles trimmed	Increase circuit and pole inspections	Targeted Circuits Program	Total
Staff	\$4,196,617	\$1,584,596	\$18,772,810	\$24,703,455
Company	<u>5,868,053</u>	<u>1,734,028</u>	<u>39,365,449</u>	<u>46,967,530</u>
Difference	(1,671,436)	(149,432)	(20,592,639)	(\$22,413,507)

If the Commission approves the Targeted Circuits Program, Staff recommends the Company implement a tracking mechanism within base rates whereby any over- or under-spending on the targeted circuits will be deferred and credited to or recovered from customers in a future base rate proceeding ("Targeted Circuits Tracker"). I discuss Staff's adjustments and the Targeted Circuits Tracker in more detail below.

Background

Q. PLEASE BRIEFLY SUMMARIZE APCO'S RECENT VEGETATION MANAGEMENT HISTORY IN VIRGINIA.

A. APCo's Virginia distribution network includes 602 circuits spanning 26,476 circuit miles. Currently, in Virginia, the Company employs a reactive hot-spot program, whereby the Company focuses its resources on emergent problems and leverages customer feedback and outage data to focus on the most problematic segments within its distribution network.⁹ Apart from a temporary increase in spending related to the Company's vegetation

⁹ Staff witness Joshipura discusses the Company's distribution operations and reliability in more detail.

management pilot program, the Company's annual vegetation management expense has remained generally flat since 2010. As costs have increased over time, the Company has maintained fewer annual circuit miles.

Chart 1: APCo Vegetation Management History

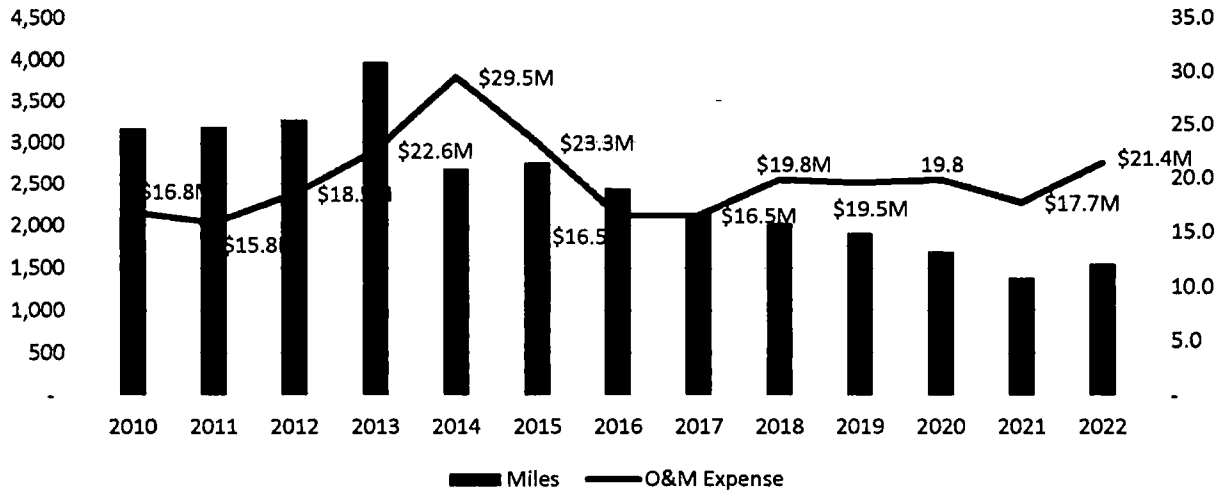
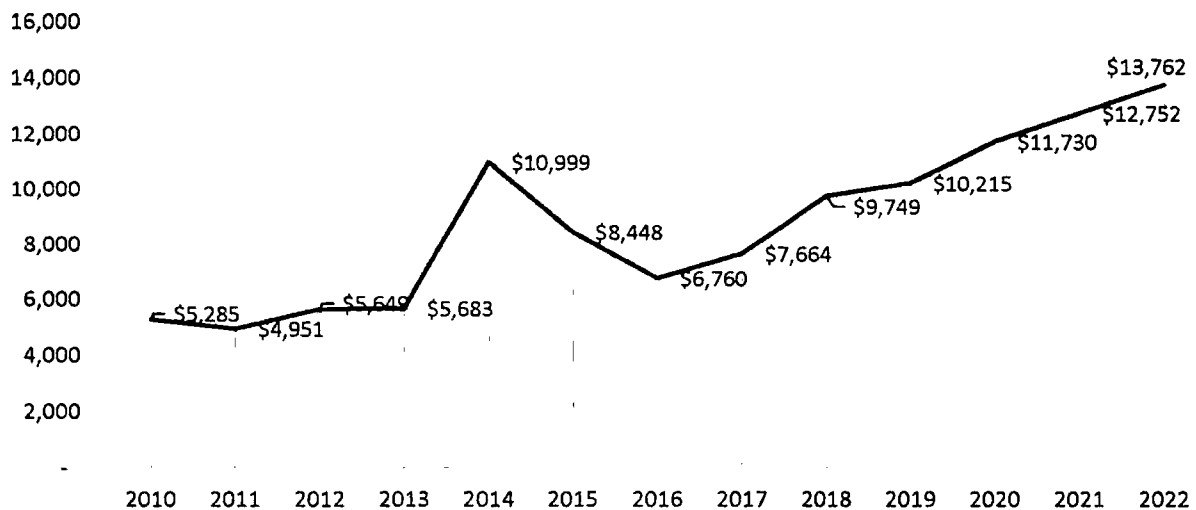


Chart 2: APCo Vegetation Management Cost Per Mile



1 Q. PLEASE SUMMARIZE THE COMPANY'S RECENT VEGETATION
2 MANAGEMENT REGULATORY REQUESTS.

3 A. In the Company's 2011 biennial review, the Commission directed the Company to develop
4 a four-year cycle-based vegetation management pilot program ("Pilot Program").¹⁰ The
5 Pilot Program cleared 30 circuits over the period 2013-2015 at a total O&M expense of
6 \$19.6 million.¹¹ Upon completion of the Pilot Program, the Company requested recovery,
7 through a rate adjustment clause ("RAC"), of the incremental costs of an accelerated
8 vegetation management program ("AVMP") to transition the Company's Virginia service
9 territory to a four-year cycle. The Commission denied approval of the program, stating in
10 its final order, "the proposed AVMP, and the rates that would be charged thereunder, are
11 not reasonable and prudent."¹² The Commission further stated, "The Commission's
12 decision herein does not preclude the Company from subsequently proposing a more
13 targeted accelerated program that will provide reliability benefits commensurate with the
14 costs attendant thereto."¹³

15 In the 2020 Triennial Review, the Company did not propose any changes to its
16 vegetation management program or its going-forward vegetation management O&M
17 expense.

¹⁰ *Application of Appalachian Power Company, For a 2011 biennial review of the rates, terms, and conditions for the provision of generation, distribution, and transmission services pursuant to § 56-585.1 A of the Code of Virginia*, Case No. PUE-2011-00037, 2011 S.C.C. Ann. Rept. 477, Final Order (Nov. 30, 2011).

¹¹ Staff witness Joshipura discusses the Pilot Program and the resulting reliability benefits in more detail.

¹² *Petition of Appalachian Power Company, For approval of a rate adjustment clause pursuant to § 56-585.1 A 5 f of the Code Virginia*, Case No. PUE-2016-00090, 2017 S.C.C. Ann. Rept. 367, 368, Final Order (July 17, 2017).

¹³ *Id.*

Targeted Circuits Program

1 **Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSED TARGETED CIRCUITS**
2 **PROGRAM.**

3 **A.** The Company proposes to implement a Targeted Circuits Program whereby it will perform
4 end-to-end trimming of its worst performing circuits, based on outage data. The Company
5 plans to trim approximately 1,400 circuit miles per year. The Company estimates the
6 Targeted Circuits Program will cost \$30,000 in O&M expense per mile,¹⁴ and the Company
7 requests an increase to vegetation management of \$39.4 million, on a jurisdictional basis,
8 to trim its ten worst performing circuits.

9 **Q. DOES STAFF SUPPORT THE IMPLEMENTATION OF THE TARGETED**
10 **CIRCUITS PROGRAM IN THE RATE YEAR?**

11 **A.** Yes. Staff witness Joshipura discusses Staff's recommendations concerning the Targeted
12 Circuits Program in his testimony.

13 **Q. DOES STAFF HAVE ANY CONCERNS ABOUT THE PROJECTED COST OF**
14 **THE TARGETED CIRCUITS PROGRAM?**

15 **A.** Yes. Staff notes the projected \$30,000 O&M cost per mile is more than twice the test year
16 cost per mile of \$12,719. Clearing 1,400 circuit miles per year would also nearly double
17 the number of right-of-way miles managed per year by the Company in Virginia.¹⁵

¹⁴ The Company also estimates the end-to-end trimming program will result in approximately \$3,000 in capital expenditures per mile. As the Company does not project capital expenditures, it is not requesting recovery of anticipated capital costs as part of its revenue requirement in this case.

¹⁵ The Company managed 1,555 miles during the Test Year under its traditional vegetation management program.

1 In support of its estimated cost per mile, the Company notes the targeted circuits
2 are in more rugged terrain and sections of those circuits have received less attention in
3 recent years and therefore required more significant trimming. The Company also cites
4 increasing labor costs as a driver of the higher cost estimate.

5 **Q. WHAT O&M COST PER MILE DOES STAFF USE AS THE BASELINE FOR ITS**
6 **TARGETED CIRCUITS PROGRAM ADJUSTMENT?**

7 **A.** Staff uses an O&M expense per mile figure of \$14,307 to develop its baseline Targeted
8 Circuits Program expense amount. Applying this figure to the Company's planned Rate
9 Year Targeted Circuits Program mileage results in a jurisdictional expense amount of
10 \$18,772,810, which is \$20,592,639 less than the Company's proposed adjustment. Staff's
11 cost per mile figure is equal to the actual O&M expense per mile during the Triennial
12 Period on the 49 circuits identified as part of the Company's three-year Targeted Circuits
13 Program.¹⁶

14 **Q. PLEASE EXPLAIN WHY STAFF BELIEVES ITS COST PER MILE FIGURE IS**
15 **AN APPROPRIATE BASELINE FOR THE TARGETED CIRCUITS PROGRAM.**

16 **A.** Staff acknowledges that the projected cost of end-to-end trimming of the Company's most
17 challenging circuits is difficult to predict. Staff believes actual historical data is generally
18 more reliable as a predictor of Rate Year costs than projected costs that are subject to
19 changing labor market conditions and are not locked-in by long-term contracts at this time.
20 Staff notes that even with rising inflation rates during 2022, the cost per mile on the targeted
21 circuits was higher in both 2020 and 2021 than in 2022. Staff's cost per mile for work on

¹⁶ See Staff Adj. 20, Workpaper B for Staff's calculation of targeted circuits cost per mile, which is based on information provided in response to Staff Int. No. 7-178.

1 the Targeted Circuits Program is also 12.5% higher than the cost per mile requested by the
2 Company for its traditional vegetation management work, thereby building in a premium
3 that acknowledges the more difficult nature of work on these circuits.

4 As the Company obtains more data on the cost of end-to-end trimming of the
5 targeted circuits, the baseline expense can be updated in future cases. Furthermore, Staff's
6 proposed Targeted Circuits Tracker, discussed below, provides for the deferral and future
7 amortization of any cost over- or under-runs associated with the Targeted Circuits Program.

8 **Q. PLEASE EXPLAIN HOW STAFF'S PROPOSED TARGETED CIRCUITS**
9 **TRACKER WORKS.**

10 **A.** Under Staff's proposed Targeted Circuits Tracker, the baseline level of Targeted Circuits
11 Program costs (i.e., the level of costs included in the approved revenue requirement in this
12 proceeding) would be recorded as an O&M expense each year. If the Company spends
13 less than the baseline on the Targeted Circuits Program, such under-spend will be deferred
14 in a liability account to be returned to customers in the next rate case. Likewise, if the
15 Company spends more than the baseline, such over-spend, if reasonable and prudent, will
16 be deferred in an asset account to be recovered from customers in the next rate case.

17 If the deferral amount is a liability balance, it should be included, net of taxes, as a
18 reduction to rate base. This compensates customers for the carrying costs associated with
19 paying APCo more than APCo's incurred costs to date (amortization of amounts over- or
20 under-collected by APCo is discussed below). Should the Company instead spend beyond
21 its baseline amount and end up with an asset balance resulting from under-collection of
22 costs, the deferral balance should be reflected as a zero in Earnings Test and going-forward

1 rate bases. This protects ratepayers from the carrying costs associated with any potential
2 cost overruns that the Company is now guaranteed to recover, if prudently incurred, as
3 opposed to having the opportunity to recover, as is traditional with base rate costs.

4 When the Company files its application for its next base rate case, it should be
5 required to provide an update of work performed to date and demonstrate that all costs
6 requested for recovery under the Targeted Circuits Program were prudently incurred. The
7 Company should also be required to provide an updated work plan for the upcoming years
8 and propose a new baseline amount to accrue. A baseline amount, plus amortization of the
9 over- or under-spend captured in the Targeted Circuits Program deferral, will be included
10 in the new going-forward cost of service.¹⁷

11 **Q. CAN YOU PROVIDE A SIMPLE EXAMPLE OF HOW THE TARGETED**
12 **CIRCUITS TRACKER WOULD WORK?**

13 **A.** Yes. Let's start with an example of an under-spend scenario. Assume the Commission
14 approves a baseline expense of \$20 million. That amount will be included in the
15 Company's revenue requirement. During calendar year 2024, the Company will accrue
16 \$20 million to a deferral account. Assume the Company spends \$15 million on the
17 Targeted Circuits Program during 2024. As of December 31, 2024, the Company will have
18 a deferral liability balance of \$5 million in its Targeted Circuits deferral account.

¹⁷ The Commission may wish to adjust the amortization period based on the magnitude of the over- or under-spend balance or simply to line it up with the Company's next anticipated base rate case.

1 Assume the Company files a base rate case in 2025 with a test year of 2024. The
2 Commission will reduce rate base in the 2024 earnings test by \$5 million, net of taxes.¹⁸
3 Assume the Commission approves continuing the \$20 million baseline for the next year
4 and directs the Company to amortize the under-spend amount over a 24-month period.
5 O&M expense in the going-forward revenue requirement would be \$17.5 million
6 (\$20 million for the updated baseline less \$2.5 million to amortize the under-spend over
7 two years).

8 **Q. CAN YOU PROVIDE AN EXAMPLE OF AN OVER-SPEND SCENARIO?**

9 **A.** Yes. Let's assume the same \$20 million initial baseline as above for 2024, but let's say the
10 Company actually spends \$30 million during the year. The Company files its 2025 base
11 rate case with a deferral asset balance of \$10 million. The Commission will adjust the
12 thirteen-month average deferral balance to zero, holding customers harmless for the
13 carrying costs associated with the over-spend. Assume the Commission approves
14 continuing the \$20 million baseline and directs the Company to amortize the over-spend
15 over a 24-month period. O&M expense included in the going-forward revenue requirement
16 would be \$25 million (\$20 million for the new baseline expense and an additional
17 \$5 million to amortize the over-spend amount over two years).

¹⁸ This is a simplified example. In actuality, the reduction would reflect the 13-month average deferral balance, net of tax.

1 Q. WHY DOES STAFF BELIEVE THE TARGETED CIRCUITS TRACKER IS
2 NECESSARY?

3 A. The proposed Targeted Circuits Program represents a significant increase in the scope and
4 cost of vegetation management in APCo's Virginia service territory. There is a real risk
5 that, despite the Company's best efforts and prudent management, the uncertain labor
6 market or other factors beyond the Company's control will prevent the Company from
7 spending its authorized amount. In that case, customers could wind up paying more for
8 vegetation management through the rates set in this proceeding than the Company winds
9 up spending. Absent the tracker, this could benefit shareholders at customers' expense.
10 There is an equal risk that cost overruns will ultimately cost ratepayers far more than can
11 be justified under a prudent cost/benefit analysis.

12 Staff's proposed Targeted Circuits Tracker provides a measure of security for both
13 APCo and its ratepayers. APCo can embark on its Targeted Circuits Program with a level
14 of security that it will recover its prudently incurred costs. Ratepayers will see unspent
15 Targeted Circuit Program dollars returned to them, with carrying costs, and will be shielded
16 from carrying costs associated with prudent costs beyond the baseline amount.

17 Q. ARE THERE ANY EXAMPLES OF A SIMILAR MECHANISM THAT HAVE
18 BEEN PREVIOUSLY APPROVED BY THE COMMISSION?

19 A. Yes. Columbia Gas of Virginia has a similar tracking mechanism in its base rates to
20 recover Eligible Safety Activity Costs ("ESAC") arising from its Distribution Integrity
21 Management Program.¹⁹

¹⁹ See *Application of Columbia Gas of Virginia, Inc., For authority to increase rates and charges and to revise the terms and conditions applicable to gas service*, Case No. PUE-2016-00033, Doc. Con. Cen. No.170210185, Report

1 Q. IF THE COMPANY EVENTUALLY TRANSITIONS FROM A TARGETED
2 CIRCUITS APPROACH TO A CYCLE-BASED VEGETATION MANAGEMENT
3 APPROACH, WOULD STAFF'S PROPOSED TRACKING MECHANISM END
4 AT THAT TIME?

5 A. In the event of a transition to cycle-based trimming, the Commission could decide whether
6 it wishes to wind down the Targeted Circuits Tracker or continue it as a tracking
7 mechanism and ratepayer safeguard for a cycle-based trimming program. APCo is not
8 requesting approval of cycle-based trimming in this case, so whether to continue the
9 Targeted Circuits Tracker as a cycle-based cost tracker can be addressed in a future case.

10 Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS CONCERNING THE
11 COMPANY'S PROPOSED TARGETED CIRCUITS PROGRAM.

12 A. Staff recommends the Commission:

- 13 1) Approve the Targeted Circuits Program, as recommended by Staff witness
14 Joshipura;
- 15 2) Set a baseline O&M expense of \$18,772,810 to be included in the revenue
16 requirement and accrued annually beginning in 2024 as the baseline for the
17 Targeted Circuits Tracker;
- 18 3) Approve the Targeted Circuits Tracker, as recommended by Staff.

of Deborah V. Ellenberg, Chief Hearing Examiner (Feb. 8, 2017) for a discussion of Columbia Gas of Virginia's ESAC tracking mechanism.

Other Vegetation Management Adjustments

1 **Q. PLEASE DESCRIBE STAFF'S OTHER ADJUSTMENTS TO VEGETATION**
2 **MANAGEMENT.**

3 **A. As shown in Table 4 above, Staff also proposes adjustments to Rate Year O&M expense**
4 **for the Company's traditional vegetation management program and for its pole and circuit**
5 **inspections.**

6 **Q. PLEASE EXPLAIN THE DIFFERENCES BETWEEN STAFF'S AND THE**
7 **COMPANY'S TRADITIONAL VEGETATION MANAGEMENT**
8 **ADJUSTMENTS.**

9 **A. Both Staff and the Company propose an adjustment to increase traditional vegetation**
10 **management miles maintained back to its 2017-2019 average of 2,031 miles, based on an**
11 **average Triennial Period cost per mile of \$12,719. Staff compares its Rate Year vegetation**
12 **management expense of \$25,831,349 to test year expense, while the Company compares**
13 **the same Rate Year expense to its Triennial Period average expense, resulting in a higher**
14 **adjustment amount. Going-forward adjustments necessarily use the test year as their**
15 **baseline, and any Rate Year adjustment amounts should be compared against the test**
16 **expense already built into the cost of service. As a result of this calculation difference,**
17 **Staff's adjustment is \$1,671,435 less than the Company's adjustment.**

1 Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN THE STAFF'S AND
2 COMPANY'S POLE INSPECTIONS ADJUSTMENTS.

3 A. Staff does not oppose the Company's proposals to conduct circuit and pole inspections on
4 a five- and ten-year cycle, respectively. However, Staff uses test year cost per inspection²⁰
5 as the basis for its adjustment while the Company uses a projected cost estimate. As with
6 the Targeted Circuits Program, Staff relies on historical data to develop its Rate Year
7 expense. As a result, Staff's adjustment is \$149,432 less than the Company's adjustment.

Vegetation Management Conclusion

8 Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS CONCERNING
9 VEGETATION MANAGEMENT EXPENSE.

10 A. Staff's proposed Rate Year adjustments to vegetation management should be approved as
11 shown in the table below. Staff recommends the Commission approve the Company's
12 Targeted Circuits Program, as recommended by Staff witness Joshipura, and recommends
13 that costs associated with that program be booked and recovered in accordance with Staff's
14 proposed Targeted Circuits Tracker.

Table 5: Staff's Proposed Vegetation Management Adjustments

Description	Increase general right-of-way miles trimmed	Increase circuit and pole inspections	Targeted Circuits Program Baseline	Total
Staff	\$4,196,617	\$1,584,596	\$18,772,810	\$24,703,455

²⁰ The Company did not conduct any inspections in 2020 or 2021, so there were no costs incurred in those years to further inform Rate Year inspection costs.

DEPRECIATION STUDY

Introduction

1 **Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS CONCERNING THE**
2 **COMPANY'S FILED DEPRECIATION STUDY.**

3 **A.** Staff accepts the Company's depreciation study, with one revision, for implementation
4 January 1, 2023, coincident with the study date of December 31, 2022.²¹ Staff's
5 recommended depreciation rates include a 2032 retirement date for Amos units 1 and 2 and
6 a 2033 retirement date for Amos unit 3, which is the same as the Company's proposed
7 retirement date. For account 365 – Overhead Conductors and Devices, Staff recommends
8 a 40-R1 retirement curve. This change results in a reduction in going-forward depreciation
9 expense of \$1,039,445.

Amos Retirement Date

10 **Q. PLEASE DISCUSS THE COMPANY'S PROPOSED RETIREMENT DATE FOR**
11 **THE AMOS GENERATING UNITS.**

12 **A.** The Company presented depreciation rates for Amos generating units using both a
13 2032/2033 retirement date²² and a 2040 retirement date. The Company believes the units
14 are capable of operating until 2040 and has conducted economic analyses as part of its
15 2022 Integrated Resource Plan ("2022 IRP") and subsequent Virginia Clean Economy Act
16 plans, which indicate Amos will continue to provide economic value as a capacity resource

²¹ Staff's proposed depreciation rates are presented in Appendix A.

²² Under this proposal, Amos units 1 and 2 are projected to retire in 2032 and Amos unit 3 in 2033. These retirement dates reflect a 60-year life from their in-service dates of 1972 and 1973, respectively.

1 through 2040.²³ However, based on the Commission's rulings in APCo's 2014 biennial
2 review and 2020 Triennial Review, the Company proposes leaving the retirement dates for
3 the Amos units at 2032 and 2033.

4 **Q. WHAT IS STAFF'S PROPOSED RETIREMENT DATE FOR THE AMOS UNITS**
5 **IN THIS PROCEEDING?**

6 **A.** Staff continues to recommend a 2032/2033 retirement date for the Amos generating units.

7 **Q. WHY DOES STAFF RECOMMEND A 2032/2033 RETIREMENT DATE FOR**
8 **AMOS?**

9 **A.** While it is possible the units may remain in service as late as 2040, Staff believes a
10 2032/2033 retirement date continues to represent the most reasonable and conservative
11 retirement date for depreciation rate setting purposes for several reasons.

12 1) a 60-year total lifespan, as reflected by the 2032/2033 retirement date, is a
13 reasonable assumption for the Amos units.

14 2) It is unlikely the Company will ultimately retire its entire coal fleet, representing
15 the majority of its capacity, all at once in 2040.

16 3) There continues to be legal uncertainty that makes an extension of the projected
17 Amos lifespan unreasonable at this time.

18 4) In general, an earlier retirement date is considered more conservative for
19 depreciation purposes, as it is simpler and creates less inter-generational inequities
20 to lengthen a lifespan than to shorten it.

21 I discuss each of these in more detail below.

²³ See Direct Testimony of Will K. Castle at 6, 8.

1 Q. PLEASE EXPLAIN WHY A 60-YEAR LIFESPAN IS REASONABLE FOR THE
2 AMOS UNITS.

3 A. The 2032/2033 retirement dates represent a 60-year life for the Amos units, which was the
4 assumed lifespan for most of the units' life and is the same lifespan consistently proposed
5 for Mountaineer, the Company's other coal-fired generating station. Furthermore, of the
6 Company's five coal units that retired in 2015, only one, Glen Lyn unit 5, had a lifespan as
7 long as or longer than 68 years, which would be the projected lifespan for Amos units 1
8 and 2 if a 2040 retirement date were approved. The following chart shows the lifespans
9 for APCo's currently in service and recently retired coal units.

Table 6: APCo Generation Fleet Retirement Dates

Generating Station	In-Service Date	Retirement Date	Lifespan
Amos 1 & 2	1972	2032	60
Amos 3	1973	2033	60
Mountaineer	1980	2040	60
Clinch River 3	1961	2015	54
Glen Lyn 5	1944	2015	71
Glen Lyn 6	1957	2015	58
Kanawha River	1952	2015	63
Sporn	1950	2015	65
Average of 2015 Retirements			62.2

10 As shown by the Company's recent coal retirement experience, a 68-year lifespan
11 is not unprecedented, but would be longer than most of the Company's other coal unit
12 lifespans. A 60-year lifespan matches more closely with the Company's actual and
13 projected lifespans for its other coal units.

1 **Q. PLEASE DISCUSS THE IMPLICATIONS OF PROJECTING THE SAME**
2 **RETIREMENT DATE FOR BOTH THE AMOS AND MOUNTAINEER**
3 **GENERATING STATIONS.**

4 **A.** The Amos and Mountaineer generating stations, combined, represent approximately 75%
5 of APCo's current capacity. Including new additions, the Company's 2022 IRP projects
6 capacity reserves of 1,475 MW in 2036, the last year projected in the Company's 15-year
7 IRP plan. Amos and Mountaineer have a combined net maximum capacity of 4,250, far
8 greater than projected reserves. Thus, given the capacity deficit that will be created by the
9 retirements of Amos and Mountaineer, it is likely the Company will need to add additional
10 capacity resources prior to 2040 (or else further extend the life of one or both generating
11 stations). New capacity additions could change the economic analysis of the Amos units.
12 Given the uncertainty around how the Company will continue to meet its capacity
13 obligations, it reasonable at this time to keep a 2032/2033 retirement date for Amos.

14 **Q. PLEASE DISCUSS THE LEGAL UNCERTAINTY SURROUNDING COAL**
15 **PLANT RETIREMENTS.**

16 **A.** Pursuant to Code § 56-585.5, APCo must meet an increasing percentage of its total electric
17 energy sold by renewable sources each year, escalating to 100% of energy sales by 2050.
18 This will necessitate significant investment in renewable resources that could impact future
19 economic analyses of the Atmos units, along with any other potential state or federal
20 legislation that could impact the economics of coal units. Given this legal uncertainty, it
21 is reasonable to continue to use the earlier Amos retirement date.

1 Q. PLEASE DISCUSS THE ROLE OF CONSERVATISM IN SETTING
2 RETIREMENT DATES FOR MAJOR GENERATING STATIONS.

3 A. For large generating stations depreciated using the lifespan method, the risk to ratepayers
4 of setting a too-late retirement date is greater than the risk of setting a too-early retirement
5 date. If, in the Company's next depreciation study,²⁴ it becomes apparent that Amos will
6 continue in service beyond 2032/2033 and the lifespan must be extended by eight years,
7 the remedy will be to lower depreciation rates to amortize the over-recovery.²⁵ If, however,
8 a 2040 retirement date is selected and must later be accelerated, the result will be either
9 much higher depreciation rates to amortize the under-recovery of costs over a shortened
10 remaining life or potentially an impairment that places an inordinate level of capital cost
11 recovery into a single time period. Because of this risk imbalance, Staff believes it is
12 appropriate to treat lifespan extensions with a greater measure of skepticism in depreciation
13 studies.

14 Q. WHAT WOULD BE THE IMPACT ON THE REVENUE REQUIREMENT IN
15 THIS CASE OF USING A 2040 RETIREMENT DATE FOR AMOS?

16 A. Staff calculates the going-forward effect of its proposed depreciation rates in Adj. No. 51.
17 Using depreciation rates based on a 2040 retirement date would reduce depreciation
18 expense by \$35.9 million. Rate base would increase by the same amount, as accumulated
19 depreciation would be lower.

²⁴ Consistent with Commission practice for APCo and other Virginia utilities, Staff recommends the Company file its next depreciation study based on a study date no later than December 31, 2027, five years after the study date of this depreciation study.

²⁵ In practice, the lifespan approach to depreciation analysis often results in higher depreciation rates as a unit moves closer to its retirement date, as interim additions necessary to continue operations must be depreciated over a shorter time period. In this example, depreciation of interim additions would likely mitigate the rate reduction to some degree.

1 Q. IF THE COMMISSION APPROVES A 2040 RETIREMENT DATE FOR
2 DEPRECIATION RATE SETTING PURPOSES, DOES STAFF RECOMMEND
3 ANY ADDITIONAL CUSTOMER SAFEGUARDS?

4 A. If the Commission adopts a 2040 retirement date for Amos in the current depreciation
5 study, Staff recommends the Commission require APCo to notify Staff immediately of any
6 changes in Amos' projected retirement date, and to then file as soon as practicable a limited
7 depreciation study updating rates for the Amos plant to reflect the new retirement date.

Distribution Plant

8 Q. WHAT RETIREMENT CURVE DOES THE COMPANY PROPOSE FOR ITS
9 OVERHEAD CONDUCTORS AND DEVICES ACCOUNT?

10 A. The Company proposes a 37-R0.5 retirement curve for its overhead conductors and
11 devices, representing slightly longer average service life than the 35-R0.5 retirement curve
12 accepted in the prior depreciation study.²⁶

13 Q. WHAT RETIREMENT CURVE DOES STAFF RECOMMEND FOR THIS
14 ACCOUNT?

15 A. Staff recommends a 40-R1 retirement curve, which reflects Staff's belief that, based on the
16 Company's historical experience and anticipated future maintenance practices, the
17 Company's overhead conductors will remain in service, on average, for 40 years rather than
18 the Company's proposed 37 years. Staff's proposed curve is a good representation of the

²⁶ Plant retirement characteristics are represented by retirement curves consisting of an average service life, which is the length of time the average piece of plant will be used in service before retirement, and a retirement dispersion, represented as left-modal, symmetric, or right-modal along with a number that indicates how close to the average the most common service life is at retirement. For this account, the Company proposes a 37-year average service life and a modal retirement age just longer than the average service life.

Company's historical experience, based on commonly accepted analytical tools, while more closely matching the retirement curves used by other Virginia electric utilities.²⁷ Finally, Staff believes the additional vegetation management expense proposed in this case should help to extend the useful life of APCo's overhead conductors going forward.²⁸ Use of Staff's proposed curve reduces going-forward depreciation expense by \$1.04 million, and increases rate base by the same amount.

Q. PLEASE DISCUSS ANY OTHER ISSUES ARISING FROM THE DEPRECIATION STUDY.

A. Staff has two other issues of note. First, Staff notes the Company is currently requesting approval to transfer certain distribution substation equipment with a net book value of \$7.6 million as of February 2023, to Steel Dynamics, Inc. ("SDI Transfer Case").²⁹ The transfer has no impact on the current depreciation study but will impact the useful life and theoretical reserve analysis in the next depreciation study after the transfer is completed. Staff will address the appropriate accounting treatment for the transfer and outstanding net book value in the SDI Transfer Case and the next depreciation study.

Second, the Company proposes zero net salvage for account 367 – Underground Conductors and Devices, despite significant cost of removal amounts being charged to that

²⁷ See Appendix A for a comparison of approved retirement curves for account 365 across Virginia electric utilities. While retirement characteristics will differ from company to company for a variety of reasons, benchmarking retirement curves against other utilities is a common practice to inform the depreciation analysis.

²⁸ See the Company's response to Staff Interrogatory No. 7-179 for a detailed discussion on the potential useful life extension benefits of increased vegetation management.

²⁹ *Petition of Appalachian Power Company, For approval to transfer utility assets pursuant to Chapter 5 of Title 56 of the Code of Virginia*, Case No. PUR-2023-00076, Doc. Con. Cen. No. 230510130, Petition and Request for Expedited Consideration (May 3, 2023).

1 account.³⁰ The Company states its practice is to retire its underground conductors in place,
2 which should result in minimal cost of removal. Based on the Company's operational
3 practices, Staff does not oppose the use of a zero net salvage factor in this study. Staff
4 recommends the Company review its booking practices for account 367 retirements to
5 ensure all salvage and cost of removal amounts are appropriately accounted for and
6 reflected in the Company's next depreciation study.

Depreciation Study Conclusion

7 **Q. PLEASE SUMMARIZE STAFF'S CONCLUSIONS AND RECOMMENDATIONS**
8 **CONCERNING THE DEPRECIATION STUDY.**

9 **A.** Staff recommends the Commission accept the Company's depreciation study for
10 implementation January 1, 2023, with Staff's proposed revision to account 365.

FUEL DEFERRAL BALANCE

11 **Q. PLEASE SUMMARIZE THE FUEL MITIGATION PLAN IMPLEMENTED IN**
12 **THE COMPANY'S MOST RECENT FUEL FACTOR CASE.**

13 **A.** In its most recent fuel factor filing, the Company proposed, and the Commission adopted,
14 a plan to amortize its projected \$361.4 million fuel under-recovery balance over a two-year
15 period, from November 1, 2022, through October 31, 2024 ("Fuel Mitigation Period"),
16 instead of a single year, reducing the fuel factor bill increase from \$33 per month for a
17 residential customer using 1,000 kWh of energy to \$20 per month ("Fuel Mitigation

³⁰ Over the last five years, account 367 has experienced a negative net salvage ratio of -73%.

Plan").³¹ Staff did not oppose the Company's Fuel Mitigation Plan, but noted that similar, previous mitigation plans have included a mechanism to share the increased carrying costs generated by the mitigation plan between ratepayers and shareholders.³²

Q. PLEASE SUMMARIZE STAFF'S PROPOSED 50-50 SHARING OF CARRYING COSTS ARISING FROM THE COMPANY'S FUEL MITIGATION PROPOSAL.

A. In light of the significant revenue requirement increase requested in this case and in the 2022 Fuel Factor to be borne by customers, Staff believes it would be appropriate to share the incremental carrying costs arising from the Fuel Mitigation Plan 50-50 between ratepayers and shareholders. Staff therefore makes adjustments to reduce the fuel deferral balance by \$24 million during the 2022 Earnings Test and \$19.2 million during the Rate Year.

Q. PLEASE EXPLAIN HOW FUEL COSTS ARE RECOVERED FROM RATEPAYERS.

A. The costs of fuel and purchased power expense are recovered on a dollar-for-dollar basis through the Company's fuel factor. The over- or under-recovery of fuel costs is included in rate base as a base rate item, and is typically amortized over a twelve-month period as part of the fuel rate approved in each fuel factor filing. An under-recovery therefore represents an additional cost to ratepayers through an increased rate base until it is fully

³¹ *Application of Appalachian Power Company, To increase its fuel factor pursuant to § 56-249.6 of the Code of Virginia*, Case No. PUR-2022-00139, Doc. Con. Cen. No. 230310122, Order Establishing 2022-2023 Fuel Factor (Mar. 6, 2023) ("2022 Fuel Factor Order").

³² See *Application of Virginia Electric and Power Company, To revise its fuel factor pursuant to § 56-249.6 of the Code of Virginia*, Case No. PUR-2022-00064, Doc. Con. Cen. No. 220920050, Order Establishing 2022-2023 Fuel Factor (Sep. 16, 2022), and *Application of Virginia Electric and Power Company, To revise its fuel factor pursuant to § 56-249.6 of the Code of Virginia*, Case No. PUE-2014-00033, 2014 S.C.C. Ann. Rept. 418, Order Establishing 2014-2015 Fuel Factor (Sep. 18, 2014).

1 amortized. A longer amortization period will therefore increase carrying costs borne by
2 ratepayers.

3 **Q. WHY DOES STAFF BELIEVE A 50-50 SHARING OF CARRYING COSTS IS**
4 **APPROPRIATE IN THIS CASE?**

5 **A.** The Fuel Mitigation Plan will result in an elevated fuel deferral balance during the Fuel
6 Mitigation Period, the cost of which would be typically borne by ratepayers. The intent of
7 the Mitigation Plan is to "moderate the impact of the rate increase on customers."³³ The
8 tradeoff of this moderated impact on immediate rates is increased carrying costs, which
9 impacts the 2022 Earnings Test earned return and increases the Rate Year revenue
10 requirement. Given the Commission's stated goal to moderate the impact of rate impacts,
11 Staff believes it is appropriate to share carrying costs between ratepayers and shareholders.

12 **Q. WHAT IS THE EFFECT OF STAFF'S 50-50 SHARING MECHANISM ON THE**
13 **EARNINGS TEST AND GOING-FORWARD ANALYSIS?**

14 **A.** Staff proposes an adjustment to reduce the 2022 Earnings Test rate base by \$24.0 million
15 to reflect the 50-50 sharing of fuel costs, net of federal income taxes, subject to the Fuel
16 Mitigation Plan. Since the Fuel Mitigation Plan began in October 2022, the balance is pro-
17 rated to reflect that the sharing is in effect for only three months of the 13-month average
18 fuel deferral balance.

19 Staff's going-forward adjustment reduces the fuel deferral balance by the average
20 amount to be shared during the Rate Year, net of federal income taxes. Staff's adjustment
21 reduces going-forward rate base by \$19.2 million.

³³ 2022 Fuel Factor Order at 5.

COVID-19 REGULATORY ASSET

1 **Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSED COVID-19**
2 **REGULATORY ASSET AMORTIZATION ADJUSTMENT.**

3 **A.** In accordance with the Commission's order in Case No. PUR-2020-00074, the Company
4 has deferred incremental expenses, including carrying costs on the deferral balance, related
5 to the COVID-19 pandemic ("COVID-19 Regulatory Asset"). Over the period of March
6 2020 through December 2022, the Company incurred \$6.49 million in incremental
7 expenses and an additional \$1.04 million in carrying costs. The Company proposes to
8 recover its COVID-19 Regulatory Asset over a three-year period beginning January 2024
9 and ending December 2026. The Company is not requesting ongoing carrying costs of the
10 unamortized COVID-19 Regulatory Asset balance after December 2022. The Company's
11 proposed COVID-19 Regulatory Asset amortization adjustment increases expense by
12 \$2.4 million.

13 **Q. HAS STAFF REVIEWED THE COMPANY'S COVID-19 REGULATORY ASSET**
14 **DEFERRAL PROPOSAL?**

15 **A.** Yes. Staff does not take issue with the Company's proposed COVID-19 Regulatory Asset
16 deferral balance as of December 31, 2022, or its proposal to recover those costs over three
17 years. Staff does make a minor correction to the jurisdictional factor used to calculate the
18 annual amortization amount. As the majority of the incremental costs are bad debt
19 expenses, Staff believes the Virginia-Only Revenue allocation factor is more appropriate
20 than the Company's proposed Virginia-Only Demand factor. This change reduces the
21 annual amortization amount by \$17,000.

1 Q. WHEN DOES STAFF PROPOSE TO BEGIN AMORTIZATION OF THE COVID-
2 19 REGULATORY ASSET?

3 A. Consistent with long-standing treatment of regulatory assets, Staff proposes to begin
4 amortizing the regulatory asset January 1, 2023, immediately after the regulatory asset
5 account balance was finalized. As such, a three-year amortization of the COVID-19
6 Regulatory Asset balance would be complete December 2025.³⁴

GENERATION O&M EXPENSE

CCR Litigation Expenses

7 Q. PLEASE SUMMARIZE THE COMPANY'S ADJUSTMENT TO REFLECT A
8 RATE YEAR LEVEL OF CCR EXPENSES.

9 A. Throughout the Triennial Period, the Company has engaged in ongoing litigation seeking
10 damages from 16 different insurer defendant groups related to legally-mandated CCR
11 remediation requirements. Outside Services costs related to the litigation (primarily legal
12 services) were recorded to expense as incurred, while proceeds from litigation or negotiated
13 settlements were recorded as credits reducing O&M expense. As of April 2023, the
14 Company had reached confidential settlements with 14 of the 16 defendant groups.³⁵ The
15 Company proposes adjustments to normalize both outside services and proceeds related to
16 CCR litigation. Combined, these adjustments increase O&M expense by \$4.4 million,

³⁴ This recommendation does not impact the going-forward amortization expense to be recovered in this case, which uses a 2024 Rate Year.

³⁵ See the Company's response to Staff Interrogatory No. 1-36 for a summary of CCR litigation activities during the Triennial Period and early 2023.

1 primarily due to the replacement of \$15.1 million in Test Year proceeds with a normalized
2 credit of \$5.8 million on a total Company basis.

3 **Q. PLEASE EXPLAIN STAFF'S ADJUSTMENTS TO CCR LITIGATION EXPENSE.**

4 **A.** Staff reviewed the Company's CCR litigation activities during the Triennial Period, as well
5 its timeline of anticipated future CCR litigation events, and does not believe any outside
6 services expenses or proceeds are reasonably predicted to occur during the 2024 Rate Year.
7 Per the Company's confidential response to Staff Interrogatory No. 9-230, dated June 8,
8 2023, [BEGIN CONFIDENTIAL] [REDACTED]

9 [REDACTED]

10 [REDACTED] [END CONFIDENTIAL] As such, Staff does not
11 believe a Triennial Period average level of litigation expenses or proceeds can be
12 reasonably predicted to occur during the Rate Year. Staff makes adjustments to remove
13 all test year CCR litigation expenses or proceeds from the Rate Year. Staff's adjustments
14 increase expense by \$5.4 million, which is \$1.0 million than the Company's combined
15 adjustments. Staff notes that any actual expenses or proceeds related to CCR litigation that
16 are incurred during 2023 or 2024 will be included in the Earnings Tests for those years.

SO₂ Allowances

1 **Q. PLEASE EXPLAIN STAFF'S ADJUSTMENTS TO REFLECT AMORTIZATION**
2 **OF SO₂ ALLOWANCES OVER THE REMAINING LIFE OF AMOS UNITS 1 & 2.**

3 **A. Staff does not oppose the Company's proposal to amortize its outstanding SO₂ allowances**
4 **through 2032, coincident with the retirement date for Amos units 1 & 2,³⁶ with certain**
5 **revisions. First, Staff uses a ten-year amortization period, to reflect amortization beginning**
6 **January 2023, immediately after the Test Year, rather than a nine-year amortization period**
7 **beginning January 2024, coincident with the Rate Year, as the Company proposes. As**
8 **discussed above, it is appropriate and consistent with Commission precedent to begin**
9 **amortization immediately after establishing a regulatory asset.**

10 Second, Staff uses the December 31, 2022, balance of SO₂ allowances in rate base
11 as the basis for its annual amortization. The Company uses a forecasted December 31,
12 2032 balance, which includes a forecasted level of annual SO₂ allowance consumption.³⁷
13 Rather than attempt to forecast consumption, Staff believes it is more straightforward to
14 simply adjust annual amortization each year based on the prior year's ending balance and
15 the remaining amortization period. Under this approach, no projected amounts are required
16 and any outstanding balance at the end of the final year of amortization will be minimal.

17 Third, Staff matches the rate base reduction amount with the going-forward
18 amortization expense. This is the same methodology both Staff and the Company utilize
19 for their going-forward depreciation and amortization adjustments. It appropriately

³⁶ This amortization end date was chosen because Amos produced the bulk of the Company's amortization allowances.

³⁷ The Company is also granted additional SO₂ allowances annually, but since the Company prices new allowances at \$0, they do not impact the forecasted SO₂ allowance balance included in rate base.

1 matches the expense effect of a new annual amortization with the corresponding
2 accumulation of amortization in rate base.

3 **Q. WHAT IS THE IMPACT OF STAFF'S CHANGES TO THE SO₂ ALLOWANCE**
4 **AMORTIZATION ADJUSTMENTS?**

5 **A.** The combined impact of the differences outlined above is minimal. Staff's annual
6 amortization amount is \$57,000 less than the Company's and Staff's reduction to rate base
7 adjustment is \$605,000 less than the Company's adjustment.

8 **Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS CONCERNING THE**
9 **COMPANY'S PROPOSED SO₂ ALLOWANCE AMORTIZATION?**

10 **A.** Yes. As noted above, the 2032 amortization end date is based on the projected retirement
11 date of Amos units 1 & 2. Should the Commission opt for a different retirement date for
12 the Amos units, the SO₂ allowance amortization period should be adjusted to align with the
13 projected retirement date.

Generating Station O&M Expense

14 **Q. PLEASE EXPLAIN STAFF'S ADJUSTMENT TO NON-LABOR GENERATING**
15 **STATION O&M EXPENSE.**

16 **A.** The Company proposed an adjustment to reflect a normalized level of non-labor O&M
17 expense at its generating stations, including projected non-fuel consumables expense. Staff
18 reviewed the Company's projections as well as its historical budget to actual spending and

1 concluded the Company's normalized Rate Year projections are reasonably predicted to
2 occur.³⁸

3 Staff has two differences from the Company's adjustment. First, Staff compares
4 the Rate Year amount against Test Year O&M expense, rather than Triennial Period O&M
5 expense, as in the Company's adjustment. This is appropriate because the Test Year
6 amount serves as the baseline in the cost of service to which we apply adjustments to reach
7 a going-forward level of O&M expense.

8 Second, the Company's budgeting practices tend to allocate all budgeted expense
9 to a single account rather than try to project amounts for each individual expense account.³⁹
10 Staff projects total expense for each generating plant category, then allocates it to
11 individual accounts based on the Triennial Period distribution. This creates minor
12 differences in jurisdictional expense as some accounts use a demand factor and others use
13 an energy factor.

14 **Q. WHAT IS THE IMPACT OF THE DIFFERENCES BETWEEN THE STAFF AND**
15 **COMPANY ADJUSTMENTS?**

16 **A.** Staff's adjustment is \$4.3 million less than the Company's, primarily due to the impact of
17 comparing Rate Year expense against the higher Test Year baseline, rather than the lower
18 Triennial Period average baseline.

³⁸ Staff agrees with the Company's decision to use an average of 2023-2025 projections rather than the 2024 Rate Year projected amounts as certain major O&M expenses can be cyclical in nature.

³⁹ For example, the Company budgets all hydro maintenance expense to account 544 – Maintenance of Electric Plant. During the Test Year, the Company recorded hydro maintenance expense to eight different expense accounts.

ADJUSTMENTS ARISING FROM APCO'S 2020 TRIENNIAL REVIEW

1 **Q. PLEASE BRIEFLY SUMMARIZE THE OUTCOME OF APCO 2020 TRIENNIAL**
2 **REVIEW.**

3 **A.** On December 21, 2022, the Commission issued its Order on Remand in APCo's 2020
4 Triennial Review ("Order on Remand").⁴⁰ The Order on Remand approved a going-
5 forward rate increase of \$28.4 million and granted approval of Rider RCR to recover
6 revenue attributable to 2021 and 2022 over a 16-month period ending January 2024,
7 conditional on a requirement the Company impute Rider RCR revenue into the 2021 and
8 2022 earnings tests.

9 **Q. HAS THE COMPANY COMPLIED WITH THE ORDER ON REMAND?**

10 **A.** Yes. Staff reviewed the Company's earnings test adjustments to impute Rider RCR
11 revenue into the 2021 and 2022 earnings tests and believes their adjustments satisfy the
12 Commission's Order on Remand.

CONCLUSION

13 **Q. PLEASE SUMMARIZE STAFF'S FINDINGS AND RECOMMENDATIONS.**

14 **A.** Staff has the following findings and recommendations:

15 1) Staff finds the Company earned a combined return on equity of 5.49% for the Triennial
16 Period, which is \$119,572,245 below the bottom of the authorized range of 8.50% -
17 9.90%.

18 2) Based on its Earnings Test results and § A 8, Staff recommends a regulatory asset of
19 \$49,612,160 be established and amortized over a three-year period beginning

⁴⁰ *Application of Appalachian Power Company, For a 2020 triennial review of its base rates, terms and conditions pursuant to § 56-585.1 of the Code of Virginia, Case No. PUR-2020-00015, Doc. Con. Cen. No. 221230196, Order on Remand (Dec. 21, 2022).*

1 January 1, 2023. The regulatory asset amount consists of the entirety of severe weather
2 event costs incurred during the Triennial Period and eligible for deferral under § A 8.

3 3) The Commission should approve Staff's adjustments to vegetation management and its
4 proposed Targeted Circuits Tracker.

5 4) The Commission should accept the Company's depreciation study for implementation
6 as of January 1, 2023, with Staff's recommended revision to distribution overhead
7 conductors.

8 5) The Commission should direct that carrying costs arising from the Company's fuel
9 mitigation plan be shared 50-50 between ratepayers and shareholders.

10 6) The Commission should accept the Company's proposed COVID-19 and SO₂
11 allowance regulatory assets, as adjusted by Staff. Amortization of these regulatory
12 assets should begin January 1, 2023.

13 7) The Commission should adopt Staff's other adjustments and recommendations
14 addressed herein.

15 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

16 **A.** Yes, it does.